

FOUNDATION LAYOUT

DIMENSIONS LOCATING PILES ARE SHOWN TO PILE CENTERLINE.
DIMENSIONS LOCATING DRILLED PIERS ARE SHOWN TO DRILLED PIER CENTERLINE.

NOTES:

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT NO.1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 120 TONS PER PILE. DRIVE PILES AT END BENT NO.1 TO A REQUIRED DRIVING RESISTANCE OF 200 TONS PER PILE.

FOR DRILLED PIERS, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

INSTALL DRILLED PIERS AT BENT NO.1 TO A TIP ELEVATION NO HIGHER THAN 2821.0 FT AND WITH THE REQUIRED TIP RESISTANCE.

DRILLED PIERS AT BENT NO.1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 590 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 30.0 TSF.

PERMANENT STEEL CASING WILL BE REQUIRED FOR DRILLED PIERS AT BENT NO.1.DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 2842.0 FT. WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

THE SCOUR CRITICAL ELEVATION FOR BENT NO.1 IS ELEVATION 2836.0 FT. THE SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE. INSTALL DRILLED PIERS AT BENT NO. 2 TO A TIP ELEVATION NO HIGHER THAN 2811.2 FT (LT) AND 2819.0 FT (RT) AND WITH THE REQUIRED TIP RESISTANCE.

DRILLED PIERS AT BENT NO. 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 680 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 30.0 TSF.

PERMANENT STEEL CASING WILL BE REQUIRED FOR DRILLED PIERS AT BENT NO.2. DO NOT EXTEND PERMANENT CASING BELOW ELEVATION 2840.0 FT. WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

THE SCOUR CRITICAL ELEVATION FOR BENT NO. 2 IS ELEVATION 2836.0 FT. THE SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR THE DRILLED PIERS AT BENT NO.1 AND BENT NO. 2. THE ENGINEER WILL DETERMINE THE NEED FOR CSL TESTING. FOR CSL TESTING, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT NO. 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 120 TONS PER PILE. DRIVE PILES AT END BENT NO.2 TO A REQUIRED DRIVING RESISTANCE OF 200 TONS PER PILE. PROJECT NO. R-2915B

ASHE COUNTY

STATION: 242+67.42 -L-

SHEET 2 OF 3

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

BRIDGE OVER SOUTH

FORK NEW RIVER ON US 221 BETWEEN SR 1103 AND SR 1169 NBL

SHEET NO. REVISIONS S05-2 NO. BY: BY: DATE: DATE: TOTAL SHEETS 35

DRAWN BY : T.J. KIRSCHBAUM DATE : 10/29/14 _ DATE : 11/12/14 CHECKED BY : R.F. WERTMAN DESIGN ENGINEER OF RECORD : R.F. WERTMAN DATE : 11/12/14

Gannett Fleming (919) 859-4880

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* ROFESSION !

SEAL 037180

Cifaci & Walter

STR.NO.5